UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

SEP 6 1996

OFFICE OF
SOLID WASTE AND EMERGENCY
RESPONSE

MEMORANDUM

SUBJECT: National Remedy Review Board Recommendations on the Jack's Creek Superfund Site

FROM: Bruce Means, Chair
National Remedy Review Board

TO: Thomas C. Voltaggio, Director
Hazardous Waste Management Division, Region 3

Purpose

The National Remedy Review Board (NRRB) has completed its review of the proposed remedial action for the Jack's Creek Superfund Site in Maitland, Pennsylvania. This memorandum documents the NRRB's advisory recommendations.

Context for NRRB Review

As you recall, the Administrator announced the NRRB as one of the October 1995 Superfund Administrative Reforms to help control remedy costs and promote consistent and cost-effective decisions. The NRRB furthers these goals by providing a cross-regional, management-level, "real time" review of high cost (and thus potentially controversial) proposed response actions. The Board will review all proposed cleanup actions where: (1) the estimated cost of the preferred alternative exceeds $30 million, or (2) the preferred alternative costs more than $10 million and is 50% more expensive than the least-costly, protective, ARAR-compliant alternative. In its review, the NRRB considers the nature and complexity of the site; health and environmental risks; the range of alternatives that address site risks; the quality and reasonableness of the cost estimates for alternatives; Regional, State/tribal, and other stakeholder opinions on the proposed actions (to the extent they are known at the time of review); and any other relevant factors or program guidance.

Generally, the NRRB makes “advisory recommendations” to the appropriate Regional decision maker before the Region issues the proposed plan. The Region will then include these recommendations in the Administrative Record for the site. While the Region is expected to give the Board’s recommendations substantial weight, other important factors, such as subsequent public comment or technical analyses of remedial options, may influence the final Regional decision. It is important to remember that the NRRB does not change the Agency’s delegation authorities or alter in any way the public’s role in site decisions.

NRRB Advisory Recommendations

The NRRB reviewed the draft proposed plan (dated June 1996) for the Jack’s Creek Site, a submission by potentially responsible parties for the site, and other relevant site information, and discussed site issues with EPA Region 3 Remedial Project Manager Garth Connor and Commonwealth of Pennsylvania representatives on June 26, 1996. Based on this review and discussion, the NRRB does not believe there is sufficient information at this time to support the draft proposed plans’ preferred alternative (alternative 9). Specific concerns include the following elements that were not clearly defined: site specific remedial action objectives (including a clear rationale for determining a principal threat level for lead in soils above which treatment is necessary), and current and future impacts on ground water. These concerns along with other recommendations are described below.

First, the Region should clarify the rationale for how contamination will be addressed in the context of site-specific remedial action objectives. For example, if treatment in alternative nine is preferred because contaminant levels greater than 10,000 ppm lead are believed to constitute a principal threat at this site, the Region should more thoroughly explain the basis for determining this lead concentration. The Preamble to the NCP sets out a program expectation regarding the treatment of principal threats wherever practicable, and defines a principal threat “... as wastes that cannot be reliably controlled in place, such as liquids, highly mobile materials (e.g., solvents), and high concentrations of toxic compounds (e.g., several orders of magnitude above levels that allow for unrestricted use and unlimited exposure).”

The NRRB acknowledges that lead concentrations at the Jack’s Creek site are sufficiently high (up to 160 000 PPM) as to constitute a principal threat at some level. However, the Regional rationale for determining the principal threat level above which treatment is practicable and deemed necessary is unclear. Such a level should be determined on a site-specific basis and may be justified in several different ways. The Region should refer to “A Guide to Principal Threat and Low Level Threat Wastes” Superfund Publication 9380.3-06FS, dated November 1991 for additional information. Also, in considering this issue, the Region may benefit from conducting site-specific fate

and transport modeling to help evaluate the potential threat of lead leaching to ground water from the proposed containment area. It is important to remember that while the NCP expectations and the principal threat guidance support the development of alternatives, the selection of an appropriate waste management strategy is determined ultimately through the remedy selection process outlined in the NCP (i.e., all remedy selection decisions are
site-specific and must be based on a comparative analysis of the alternatives using the nine criteria).

A second fundamental concern of the NRRB is that the analysis did not clearly define current and future impacts from the site on groundwater. The narrative provided by the Region suggests elevated contamination levels in domestic drinking water sources on a sporadic basis. Further, the RPM for the site indicated that another round of samples had been taken and results were expected in the near future. The NRRB recommends that any impacts, especially as they might result in contamination of domestic supply wells, be sufficiently characterized and addressed through remedial action as necessary. Fate and transport modeling may be helpful in these analyses.

In addition, the NRRB offers the following recommendations:

The Region should consider using one or more of the recently developed adult lead exposure models (e.g., the “Bowers model” currently under consideration by a subgroup of the Superfund Lead Technical Review Workgroup) to assist in the evaluation of baseline risk, and to help establish a site-specific lead cleanup level. Although not yet adopted in formal Agency policy, use of such a model can help fine-tune, or provide additional scientific and technical support for the Region’s proposed soil lead cleanup level.

Also, the NRRB noted its support for the inclusion of the limited actions described in alternative two as part of <u>any</u> selected remedial action for the site. This support was qualified by the recommendation that these limited actions also include groundwater monitoring and an action to permanently prevent the domestic use of any onsite contaminated groundwater.

Finally, the NRRB questions the appropriateness of the proposed reconstruction of wetlands at Jack’s Creek as a fund-financed action. Based on the information presented, this action does not appear to be an appropriate remediation expenditure. Creating a new wetland to replace one destroyed by the apparent expansion of site operations is not an integral part of addressing the current or potential risks from site-specific contamination. This situation should be distinguished from situations in which cleaning up site contamination damages the wetlands. In these cases, restoring the affected wetlands under Superfund authorities would be appropriate. The NRRB recommends that the Region explore other authorities to pursue the proposed wetlands work at Jack’s Creek.

The Board members especially want to thank the Region and the Commonwealth of Pennsylvania for their participation in the review process. We encourage Region 3 management and staff to work with their Regional NRRB representative and the OERR Region 3/8 Accelerated Response Center at Headquarters to discuss appropriate follow-up actions. If you have any questions, please do not hesitate to call me at 703-603-8815.

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